

Remarks

Claims 1-9 are pending in this application.

The examiner is requested to favorably reconsider the rejection of claims 1-9 as being indefinite in view of the foregoing amendment. In the proposed amendment the typographical error has been corrected, and the disposition of the amines has now been specified . Favorable reconsideration is solicited.

Claims 1, 2 and 4 -9 stand rejected as being unpatentable over Watzenberger et al. '107. This rejection is traversed. The reference does not contemplate solutions of hydroxylamine and amines. As tacitly admitted by the examiner, the present invention relates to the steam distillation of a solution of hydroxylamine and amines wherein the hydroxylamine is stripped from the amines. The applicants respectfully urge that this process is not rendered obvious in view of Watzenberger et al. '107. The examiner is not permitted to read into the applicants' claims that which is not recited therein. The separation of hydroxylamine and salts is distinctly different from hydroxylamine and amines. The disclosure of Watzenberger et al. '107 clearly demonstrates that mixtures of different compounds require processes having different conditions of temperature, pressure, reagents, etc., the nature of which are not predictable. In example 7 Watzenberger et al. '107 discloses that water which is free of hydroxylamine is taken off at the top during the steam distillation of solutions of hydroxylamine and salt (sodium sulfate). Watzenberger et al. '107 discloses that water was distilled off via the top column in the steam distillation of salt-free stabilized hydroxylamine (example 8). These processes involve different materials, and thus, it is incumbent upon the examiner to explain by scientific principle or the citation of literature why the reference is suggestive

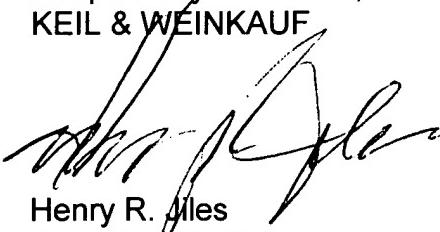
of the instantly claimed steam distillation of solutions of hydroxylamine and amines.

In view of the foregoing amendment and remarks, the applicants respectfully urge that the presently claimed process is patentable and a notice of allowance is solicited.

New claim 10 represents claim 3 in independent form.

To the extent necessary, applicant(s) petition for an Extension of Time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 1 and 2 have been amended to read as follows:

1. A process for working up solutions of hydroxylamine and amines, wherein the hydroxylamine is stripped [form] from the hydroxylamine-containing solution with steam.
2. A process as claimed in claim 1, wherein the solution is passed into a rectification column and the hydroxylamine is stripped by the countercurrent method with steam, with a top product comprising aqueous hydroxylamine and a bottom product comprising amines being obtained.

Add new claim 10.

10. A process for working up solutions of hydroxylamine and amines, wherein steam is passed counter-currently through the solution in a rectification column operated at from 0.1 to 1.0 atmospheres , and a top product comprising aqueous hydroxylamine and a bottom product comprising amines are obtained, and the top product is condensed and is partly recycled to the rectification column with a reflux ratio of less than 0.5.

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CLEAN COPY OF AMENDED CLAIMS

Claims 1 and 2 have been amended to read as follows:

1. A process for working up solutions of hydroxylamine and amines, wherein the hydroxylamine is stripped from the hydroxylamine-containing solution with steam.
2. A process as claimed in claim 1, wherein the solution is passed into a rectification column and the hydroxylamine is stripped by the countercurrent method with steam, with a top product comprising aqueous hydroxylamine and a bottom product comprising amines being obtained.

COPY OF ALL CLAIMS

1. A process for working up solutions of hydroxylamine and amines, wherein the hydroxylamine is stripped from the hydroxylamine-containing solution with steam.
2. A process as claimed in claim 1, wherein the solution is passed into a rectification column and the hydroxylamine is stripped by the countercurrent method with steam, with a top product comprising aqueous hydroxylamine and a bottom product comprising amines being obtained.
3. A process as claimed in claim 2, wherein the top product is condensed and is partly recycled to the rectification column, with reflux ratio of less than 0.5.
4. A process as claimed in claim 2, wherein the rectification column is operated at from 0.1 to 1.0 atmosphere.
5. A process as claimed in claim 2, wherein some of the product is vaporized again by means of an evaporator and the vaporous fractions are recycled to the rectification column.
6. A process as claimed in claim 2, wherein water is added to the liquid phase of the rectification column.
7. A process as claimed in claim 4, wherein the rectification column is operated at from 0.8 to 1.0 atmosphere.
8. A process as claimed in claim 6, wherein the water is passed into the bottom of the rectification column.
9. A process as claimed in claim 1, wherein the solution is from the electronics

industry.

10. A process for working up solutions of hydroxylamine and amines, wherein steam is passed counter-currently through the solution in a rectification column operated at from 0.1 to 1.0 atmospheres , and a top product comprising aqueous hydroxylamine and a bottom product comprising amines are obtained, and the top product is condensed and is partly recycled to the rectification column with a reflux ratio of less than 0.5.